September 2001, Injury Prevention Newsletter

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1. Walk to School Days

2. Poison Control

It is a parent's nightmare: a toddler found holding a partially empty container of a household cleaner. Beginning September 1, 2001, Alaskans have a new resource for information on poisoning. The new number, 1-800-222-1222, connects all callers in Alaska with the Oregon Poison Center, which will serve as Alaska's designated poison center for at least the next three years. The toll-free number is available 24 hours a day, seven days a week, throughout the year.

Poisoning in Alaska poses a significant problem, with 256 deaths from 1994 through 1998, and close to 2,700 hospitalizations involving people of all ages and many different types of poisonings. Many more cases are treated and released from emergency departments and clinics.

Until now, Alaska has lacked a centralized poison control system (largely because our state has too few people to need its own certified poison control center). The poison control center phone numbers advertised in many Alaska phone books typically ring into the Alaska Providence Medical Center pharmacy or a local hospital. There, the calls are answered by pharmacists and nurses who usually use a CD-ROM based poison reference system to give good treatment recommendations. Health and Social Services appreciates the efforts of these hospitals to provide poison control services. They were included on the steering committee that developed the system to which we're transitioning.

When contacting the poison center or other emergency personnel, callers should be prepared to give any known facts (such as the victim's age and weight, and the substance involved) to the expert answering the phone. If readily available, relevant labels, containers, or bottles involved in the poisoning should be described to the poison control expert. The labels may provide information about the product's contents and advice on what immediate first aid to perform. Information on location of the victim, and on how long it will take to reach a health clinic or a hospital, also assist the poison center expert to ma nage the case.

For more information on Alaska's new Poison Control project, contact Raj Maskay at (907) 465-3027 at the Section of Community Health and Emergency Medical Services (CHEMS), Alaska Department of Health and Social Services, or visit the CHEMS Web site at http://www.chems.alaska.gov/ems_poison_control.htm.

3. Annual EMS Symposium

The Injury Prevention Track at the 26th Annual EMS Symposium November 8-10, 2001 promises to be very exciting and informative! There will be sessions on snow machine injuries, crash injury mechanisms, avalanche safety, poisoning prevention, gatekeeper training, and child passenger safety. Information about registration is available at:

http://www.chems.alaska.gov/ems_symposium.htm

You can access the Injury Prevention Track brochure at:

http://www.chems.alaska.gov/ems_injury_prevention.htm

4. A Population-Based Assessment of Pediatric All-Terrain Vehicle Injuries.

Cvijanovich NZ, Cook LJ, Mann NC, Dean JM. Pediatrics 2001; 108(3): 631-635.

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BACKGROUND: Many injuries are sustained during recreational activities. All-terrain vehicles (ATVs) are 3- or 4-wheeled motorized vehicles with large low-pressure tires that are designed to be ridden in off-road environments. They represent a serious hazard for children. In 1988, the major manufacturers of ATVs and the US Consumer Product Safety Commission signed a consent decree that was intended to reduce the hazard. This decree included recommendations that young children not ride the vehicles and that older children only be allowed to ride vehicles that match the strength and coordination that matches the child's developmental age. State legislatures are not required to implement the age restrictions. For example, in Utah 8 year-olds have reached the minimum age to operate ATVs of any engine size. Objective: To describe the types of injuries sustained by children who ride all-terrain vehicles (ATVs), to estimate the hospital charges associated with these injuries, and to determine adherence to existing rules and regulations governing ATV use.

METHODS: Analysis of statewide hospital admissions (1992-1996) and emergency department (ED) visits (1996) in Utah. All patients who were younger than 16 years and had an external cause of injury code for ATV use were included.

RESULTS: In 1996, 268 ED visits by children involved an ATV. Boys were twice as commonly injured as girls (male:female ratio: 2.1:1), and skin and orthopedic injuries were most frequent. The median ED charge was \$368, and ED charges for these patients totaled \$138 000. From 1992 to 1996, 130 children were hospitalized as a result of injuries sustained during ATV use, with median charges of \$4240 per admission. Male to female ratio was 2.7:1, and the average age was 11.2 ± 3.6 years. Mean injury severity score was 8.0 ± 6.0 , and median length of stay was 2 days (range: 0-43 days). Orthopedic injuries were most frequent, but 25% (n = 32) of children sustained head or spinal cord injury. Most children (94%) were discharged from the hospital, but 8 children died as a result of their injuries. Utah regulations prohibit children who are younger than 8 years from driving an ATV and advise against carrying passengers on ATVs. However, 25% (n = 15) of all injured children who were younger than 8 were driving the ATV when injured, and 15% (n = 60) of injured children were passengers on ATVs. Four of the 8 fatally injured children were younger than 8, and all were driving the ATV at the time of the crash. Finally, the estimated injury rate per 100 registered ATVs is significantly higher for

children than for adults (3.41 vs 1.71).

CONCLUSIONS: ATV use results in significant injuries to children. Efforts to educate parents regarding the risks of ATV use, proper supervision, and use of safety equipment are warranted. Manufacturers of ATVs should continue to improve the safety profile of these inherently unstable vehicles.

5. Respiratory Instability of Term and Near-Term Healthy Newborn Infants in Car Safety Seats.

Merchant JR, Worwa C, Porter S, Coleman JM, deRegnier R. <u>Pediatrics</u> 2001; 108(3): 647-652. Correspondence: Raye-Anne O. deRegnier, Prentice Women's Hospital, 333 E. Superior St., Chicago, IL 60611, USA. (email: r-deregnier@northwestern.edu).

BACKGROUND: Premature infants who are discharged from intensive care nurseries are known to be at increased risk for apnea, bradycardia, and oxygen desaturation while in the upright position. These small infants also do not fit securely in standard infant car seats. Because of these problems, the American Academy of Pediatrics recommends a period of observation in a car seat for all infants who are born at < 37 weeks' gestation. It is not clear whether this recommendation should apply to the minimally pre-term infants (born at 35-36 weeks' gestation) who are healthy at birth and are hospitalized in the normal newborn nursery.

OBJECTIVES: Evaluate the respiratory stability and safety requirements of healthy, minimally pre-term infants in car seats compared with term infants.

METHODS. Fifty healthy, nonmonitored, pre-term infants (mean gestational age: 35.8 +/- 0.6 weeks) and 50 term infants (mean gestational age: 39.5 +/- 1.4 weeks) were recruited from a level I newborn nursery in a community hospital. Appropriateness of car seat fit was documented for each infant. Heart rate, respiratory rate, and pulse oximetry were evaluated while infants were supine and in their car seats. Apneic and bradycardic events were recorded in addition to a continuous recording of oxygen saturation values.

RESULTS. Twenty-four percent of pre-term and 4% of term newborn infants did not fit securely into suitable car seats despite the use of blanket rolls. Mean oxygen saturation values declined significantly in both pre-term and term infants from 97% in the supine position (range: 92%-100%) to 94% after 60 minutes in their car seats (range: 87%-100%). Seven infants (3 pre-term and 4 term) had oxygen saturation values of < 90% for longer than 20 minutes in their car seats. Twelve percent of the pre-term infants (95% confidence interval: 4.5%-24.3%) but no term infants had apneic or bradycardic events in their car seats.

CONCLUSIONS. The data support the current American Academy of Pediatrics recommendations that all infants who are born at < 37 weeks' gestation, including those who are admitted to level I community hospitals, be observed for respiratory instability and secure fit in their car seats before hospital discharge. Because lowering of oxygen saturation values was seen uniformly in all newborn infants, car seats should be used only for travel, and travel should be minimized during the first months of life.

6. What Kills Preschoolers?
By Nancy A. Melville
HealthScoutNews Reporter

SATURDAY, Sept. 8 (HealthScoutNews) -- Motor-vehicle accidents, child abuse and beatings, and pedestrian injuries are the leading causes of trauma-related deaths among preschool children, a recent study says. The youngsters' deaths most often resulted from a head injury, the researchers say.

The findings stem from data, submitted to 80 trauma centers nationwide, on 12,209 preschoolaged children. The kids had been admitted to hospitals for injuries sustained between April 1995 and August 1999. Of the group, 444 of the children died, according to reports from the National Pediatric Trauma Registry.

Car accidents accounted for about 30 percent of the deaths, child abuse and beatings totaled 21 percent and pedestrian injuries -- caused, for instance, by a child running into a street and being struck by a car -- reached 18 percent.

"The goal of our research was to compare the injury characteristics of hospitalized preschool children and measure those who die to those who survive," says lead researcher Dr. Mary Christine Bailey, a pediatric emergency physician at Children's Hospital in Boston. Findings were presented at a recent meeting of the Pediatric Academic Societies.

More youngsters were admitted to a trauma center after they'd fallen somehow than for any other reason -- 41 percent overall, the study says. But the death rate from falls was well below the top three causes of death.

Bailey says the figures for motor vehicle accidents likely are attributable, in part, to parents failing to buckle up their children properly. "It's very clear from this and other studies being conducted that people are still very unaware of the importance of booster seats and protecting kids in automobiles up to age 5," she says. "I don't think that message has gotten out to the larger community as well as it should have."

While the death rate from beatings trailed motor vehicle accidents, the researchers found that child-abuse injuries were five times more likely to result in death than unintentional injuries. The study also found that the younger the child, the more likely he or she was to die from their injuries -- regardless of the cause. "The data holds true that, as you go down the age range, the number of deaths increases," Bailey says.

Dr. Gary Smith, director of the Center for Injury Research and Policy at Children's Hospital in Columbus, Ohio, says the high rate of death from beatings, though disturbing, isn't surprising. "Intentional trauma to kids is more common than we would like to think," he says. "It is a leading cause of death."

Other leading causes of death among preschoolers, Smith says, include drowning, fire and suffocation. "Drowning is a huge cause of death in the young ages," he says. "Rates tend to peak among 1- and 2-year-olds, and then later -- at around age 15 -- it comes back up again."

"Fires are a big cause because kids can't escape," he adds, "and choking and suffocation for the younger ones is another huge cause of death."

Of all the figures on causes of deaths, however, Bailey says the deaths from child abuse are perhaps the most startling. "It's important to recognize that despite everything we've tried to do, abuse remains a significant cause of death in children," she says.

To learn more about child safety, visit the <u>American Academy of Pediatrics</u> online. And for information that could help you spot and prevent child abuse, go to <u>Prevent Child Abuse America</u>.

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7. Senior falls get special study

By Nancy Weaver Teichert

Sacramento Bee Staff Writer

(*Published Sept. 26, 2001*)

Older people who fall may lie on the floor for hours or days until someone comes to help them or they may crawl to the telephone to call 911. Many fall again and again. The Sacramento Fire Department is looking for a way to create a special team to help people 65 and older after their first fall. The goal is to prevent more injuries.

"Many times, we put them in bed, they say thank you and we leave," said Capt. Mike Balash. "You know you're going to come back. You know you're going to get called again."

Emergency medical technicians for the Sacramento Fire Department, who respond to about 2,000 such falls a year, have been trained as researchers to survey the frequency and contributing factors. The Sacramento County Adult and Aging Commission will hear in the Fire Department report today that 68 percent of those who fall have suffered other falls.

Falls pose a serious threat to the well-being of older people living independently and can drive up emergency medical care costs. One in three adults 65 and older falls each year, according to the National Center for Injury Prevention and Control. Falls are the age group's leading cause of death from injury. Repeated use of the 911 system to obtain help after a fall drives up health care costs often without offering any longer-term solutions.

"It's a health issue," explained Dr. Steven J. Weiss of UC Davis Medical Center, who trained the EMTs and co-authored the survey. "It's a monetary issue." Weiss said they surveyed the people involved in 70 emergency calls for falls over a four-month period and looked back at some older cases.

Of the people who had fallen recently, 77 percent had difficulty walking, 57 percent lived alone, 46 percent had vision problems and 30 percent lived in unsanitary conditions. About half had homes ill-equipped for their mobility problems. About half did not have non-skid strips where needed or secure handrails or grab bars, the study found. "It clearly shows there are seniors in need," said Balash.

He said the Fire Department is working with other community agencies to create a team of specialists including a nurse, social worker, pharmacist, optician and others to respond quickly to falls. So far, no funding has been found. "This is innovative. Nobody's done it before," he said. "We're in every neighborhood so we can identify seniors in need."

The emergency medical technicians are in a good position to evaluate the health, home and health care services of the people who have fallen. Many are hesitant to ask for help. "Some of these people just trust firefighters," said Balash. "They feel comfortable talking with us. We thought we could help the elderly." ********************

8. Web Resources for Injury Prevention

The U.S. Consumer Product Safety Commission protects the public from unreasonable risks of injury or death from 15,000 types of consumer products under the agency's jurisdiction. To report a dangerous product or a product-related injury, call CPSC's hotline at 800-638-2772 or CPSC's teletypewriter at 800-638-8270. Other information about the CPSC is available on the web at: www.cpsc.gov

The Insurance Institute for Highway Safety gives vehicle crash test ratings. Check out:

www.highwaysafety.org/vehicle_ratings/ratings.htm#

This message has been compiled by the Section of Community Health & EMS (CHEMS), Alaska Division of Public Health and sent to subscribers of the AK-Prev and AHELP list-serves. It has also been sent as a 'bcc' to others in Alaska including Public Health Centers, SAFE KIDS coalitions, Native Health organizations, and regional EMS Councils and Coordinators who may be interested and active in injury prevention and health promotion. The purpose is to share resources, breaking news, training opportunities, product recalls, and opinions to help prevent injuries to Alaskans. Feedback and contributions are encouraged. Contributions can be directed to Zoann Murphy: zoann_murphy@health.state.ak.us

Link for the AK-Prev & AK-EMSC list-serve: http://chems.alaska.gov/ems_list_servers.htm

Link for the AHELP list-serv: http://www.auroraweb.com/ahec